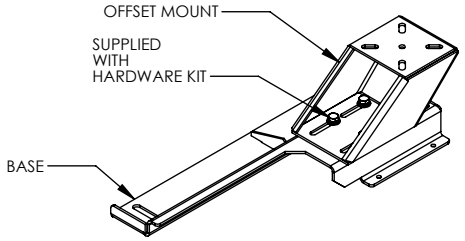
STEP 1 C-HDM-100's INSTALLATION INSTRUCTIONS
VEHICLE PASSENGER SIDE MOUNTING BASE

1. INSPECT PARTS RECEIVED TO MAKE SURE YOU HAVE THE RIGHT BRACKETS FOR THE SPECIFIC VEHICLE.
2. REMOVE ALL PLASTIC END CAPS COVERING THE SEAT BOLTS, IF APPLICABLE.
3. REMOVE FRONT SEATBOLTS, IN SOME CASES REMOVING OR LOOSENING REAR SEATBOLTS WILL EASE THE INSTALLATION PROCESS. KEEP THE SEATBOLTS FOR RE-INSTALLATION. ON VAN HDMS THE LEFT SIDE FRONT & REAR BOLTS ON THE PASSENGER SEAT SHOULD BE REMOVED (HDM MOUNT ATTACHES TO THE SIDE SEAT BOLTS).
4. IF OFFSET MOUNT IS SUPPLIED, IT'S RECOMMENDED TO INSTALL THIS AS THE LAST PROCESS. (SEE STEP 2)
5. SEE THE RECOMMENDED INSTALL GUIDELINES LISTED BELOW TO IDENTIFY WHICH IS BEST FOR YOUR INSTALLATION. IF THE HDM BASE IS NOT LISTED IT EITHER HAS ITS OWN SPECIFIC INSTRUCTION OR FOLLOWS THE SAME PROCESS AS FIGURE 1.
6. VISIT US AT www.havis.com TO SEE PICTURES OF INDIVIDUALLY INSTALLED PRODUCTS.

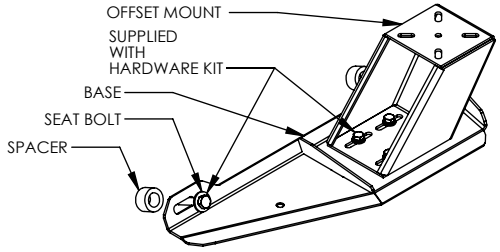
FOR VEHICLE MOUNTING THAT REQUIRES DRILLING

1. INSPECT ALL AREAS BEFORE DOING ANY DRILLING ENSURE NO SERIOUS DAMAGE HAPPENS TO THE VEHICLE.
2. SECURE THE MOUNT WITH SUPPLIED HARDWARE KIT.



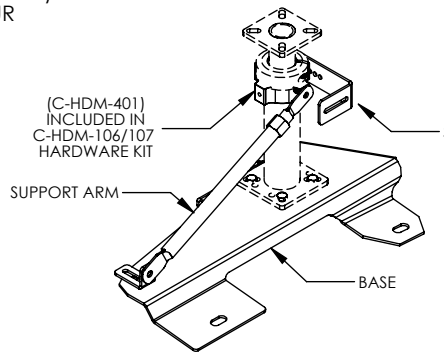
(FIG. 1) C-HDM-101 SHOWN
STANDARD NO HOLES DRILLED - VEHICLE MOUNTING WITH OFFSET BRACKET

1. LIFT THE SEAT AND PLACE BASE BETWEEN SEAT BRACKETS AND VEHICLE FLOOR, ALIGN MOUNTING HOLES TO SEATBOLT LOCATIONS. IN SOME VEHICLES, THE SEATBOLTS ARE ORIENTATED AT AN ANGLE, IF THIS IS THE CASE, THE BASE WILL SIT ON TOP OF THE SEAT BRACKET.
2. USING EXISTING SEATBOLTS, LOOSELY ATTACH ALL SEATBOLTS. USE CAUTION WHEN THREADING THE BOLTS TO AVOID STRIPPING THE THREAD.
3. FULLY TIGHTEN SEAT BOLTS.



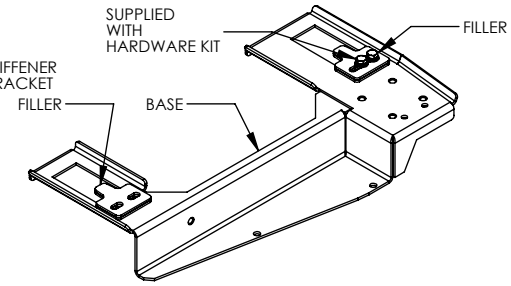
(FIG. 2) C-HDM-104 SHOWN
VEHICLE MOUNTING BASE WITH SPACER AND OFFSET BRACKET

1. PLACE THE SPACER AT THE SEATBOLT LOCATIONS TO FILL THE GAP BETWEEN THE SEAT BRACKET AND BASE. ***(C-HDM-121 ONLY REQUIRES A SPACER ON THE DRIVERS SIDE BOLT).***
2. ALIGN BASE MOUNTING HOLES TO SEATBOLT MOUNTING POINTS. USING SUPPLIED SEATBOLTS, INSERT BOLTS PASSING THROUGH THE SPACER AND SEAT BRACKET THEN HAND TIGHTEN TO AVOID STRIPPING THE THREADS.
3. FULLY TIGHTEN SEAT BOLTS.



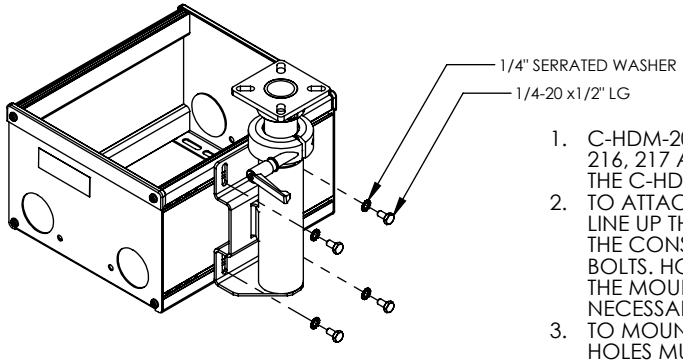
(FIG. 3) C-HDM-106 SHOWN
VEHICLE MOUNTING BASE (VAN APPLICATION)

1. LIFT THE SEAT AND PLACE BASE BETWEEN SEAT BRACKETS AND VEHICLE FLOOR, ALIGN MOUNTING HOLES TO SEAT BOLT MOUNTING POINTS. SEE NOTE 3 ABOVE.
2. USING EXISTING SEATBOLTS, LOOSELY ATTACH ALL SEATBOLTS. USE CAUTION WHEN THREADING THE BOLTS TO AVOID STRIPPING THE THREADS.
3. ATTACH POLE ASSEMBLY USING SUPPLIED HARDWARE.
4. INSTALL SUPPORT ARM AS SHOWN USING HARDWARE SUPPLIED WITH C-HDM-401 KIT. ENSURE THE C-HDM-401 DOES NOT CLAMP ABOVE THE HORIZONTAL SLOT IN THE POLE.
5. INSTALL STIFFENER BRACKET AS SHOWN, DRILL AND BOLT TO THE SEAT IF DESIRED.
6. FULLY TIGHTEN SEAT BOLTS.



(FIG. 4) C-HDM-103 SHOWN
VEHICLE MOUNTING BASE WITH FILLERS

1. REMOVE REAR SEATBOLTS. TILT THE SEAT FORWARD WHILE PULLING THE SEAT TOWARDS THE REAR TO DISENGAGE THE FRONT SEAT HOOKS.
2. ALIGN MOUNTING BASE CUT-OUT TO FRONT SEAT HOOK ENTRY. RETURN THE SEAT TO ITS ORIGINAL LOCATION WHILE HAVING THE BASE SANDWICHED BETWEEN THE SEAT BRACKET AND VEHICLE FLOOR. PUSH IN THE 2 FILLERS ON EACH SIDE TO FILL THE GAP BETWEEN THE SEAT BRACKET AND BASE. SECURE THE FILLER USING SUPPLIED HARDWARE. NOTE ONLY ONE KEY SHAPED FILLER NEEDED ON DRIVERS SIDE IF HUMP BRACKET IS BEING USED.
3. REATTACH REAR SEAT BOLTS AND FULLY TIGHTEN.



(FIG. 5) C-HDM-204 SHOWN
STANDARD NO HOLES DRILLED
CONSOLE MOUNTING

1. C-HDM-204, 205, 212, 213, 214, 215, 216, 217 ARE NOT COMPATIBLE WITH THE C-HDM-100 SERIES.
2. TO ATTACH C-HDM-204, 205, 214, 215 LINE UP THE MOUNT WITH THE NUTS IN THE CONSOLE, ATTACH USING 1/4-20 BOLTS. HOLES CAN BE DRILLED AND THE MOUNT THROUGH BOLTED IF NECESSARY.
3. TO MOUNT C-HDM-212, 213, 216, 217, HOLES MUST BE DRILLED AND THE MOUNT THROUGH BOLTED USING THE HARDWARE PROVIDED.
4. SEE NOTES FOR DRILLING

C-HDM-103- see FIG. 4
C-HDM-104- see FIG. 2
C-HDM-105- see FIG. 2
C-HDM-106- see FIG. 3
C-HDM-107- see FIG. 3
C-HDM-109- see FIG. 2
C-HDM-121- see FIG. 2
C-HDM-124- see IND. INSTALL
C-HDM-131- see IND. INSTALL
C-HDM-133- see IND. INSTALL
C-HDM-134- see IND. INSTALL
C-HDM-135- see IND. INSTALL

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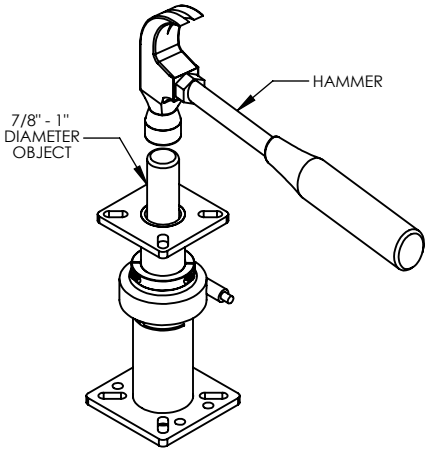
TITLE:
INSTALLATION INSTRUCTIONS,
C-HDM-100's MOUNTING BASE

SIZE	DWG. NO.	REV
A	C-HDM-100-INST	4/6/10

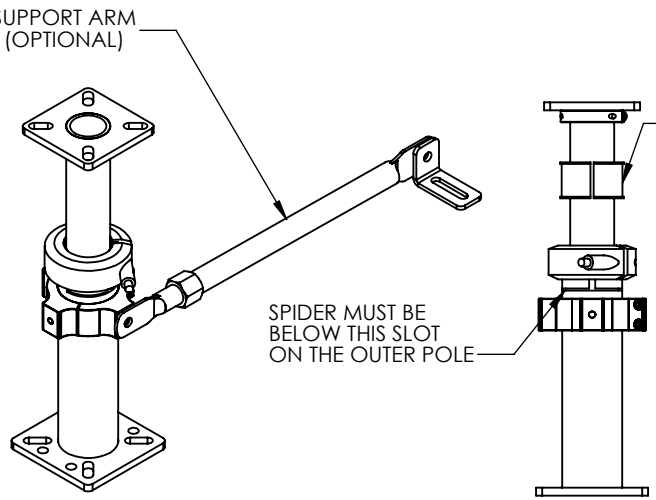
STEP 2 HEAVY DUTY MOUNT POLE PREPARATION INSTRUCTIONS



A- GUIDE RING BUSHING REMOVAL

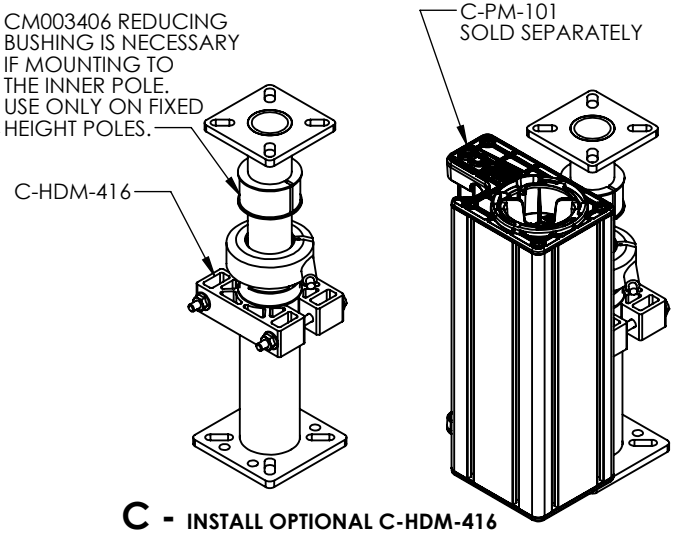
WE STRONGLY RECOMMEND NOT TO REMOVE THE GUIDE RING BUSHING, BUT IF REMOVAL OF INNER POLE IS DESIRED - FOLLOW THIS SIMPLE REMOVAL INSTRUCTION

1. INSERT MAXIMUM 1" DIAMETER OBJECT WITH SUFFICIENT LENGTH AND DROP INSIDE INNER POLE.
2. MAKE SURE NOTHING PREVENTS GUIDE RING BUSHING FROM BEING EJECTED UNDERNEATH. HIT WITH A HAMMER TO FORCE THE GUIDE RING BUSHING OUT.



B - INSTALL SPIDER COLLAR (OPTIONAL COMES WITH C-HDM-401 & 403)

1. IF MOUNTING THE SPIDER COLLAR TO THE INNER POLE USE CM003406 REDUCING BUSHING. SPREAD AND SNAP OVER THE INNER POLE.
2. LOOSELY ATTACH SPIDER COLLAR TO THE OUTER POLE OR CM003406. DO NOT MOUNT SPIDER COLLAR ABOVE OUTER POLE HORIZONTAL CUT.

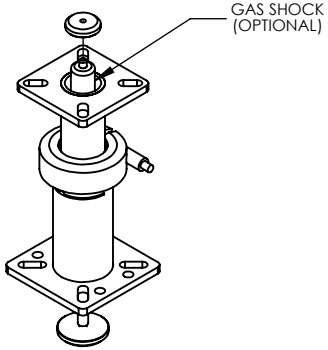


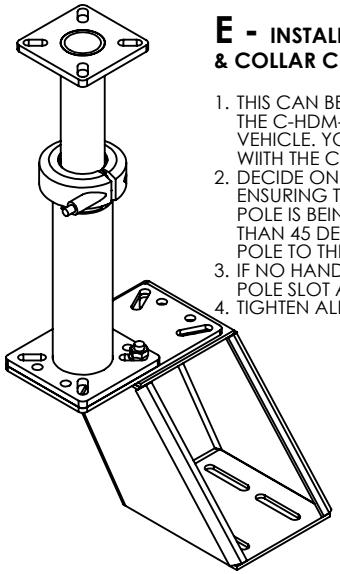
C - INSTALL OPTIONAL C-HDM-416

1. IF MOUNTING C-HDM-416 TO THE INNER POLE USE CM003406. SPREAD THE PIECE AND IT SHOULD SNAP OVER THE INNER POLE.
2. ATTACH C-PM-101 TO CLAMP ASSEMBLY USING LONG CARRIAGE BOLTS INSERTED THROUGH THE PRINTER AND ONE PIECE OF EXTRUSION.
3. ATTACH POLE CLAMP TO THE OUTER POLE OR CM003406. AFFIX SECOND PIECE OF EXTRUSION AROUND POLE AND LOOSELY TIGHTEN THE HARDWARE. DO NOT MOUNT CLAMP ABOVE OUTER POLE HORIZONTAL CUT.

D- INSTALL GAS SHOCK (OPTIONAL)

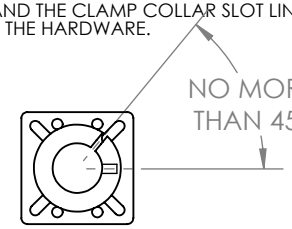
1. (SKIP IF GAS SHOCK IS NOT IN USE)
2. UNSCREW SMALL PLASTIC DISC FROM SHOCK INSERT GAS SHOCK ASSEMBLY UPWARD FROM THE BOTTOM OF HDM POLE ASSEMBLY WITH GAS SHOCK'S ROD FACING DOWNWARD. GAS SHOCK WILL SANDWICH BETWEEN MOUNTING BASE C-HDM-100 SERIES (NOT SHOWN) AND ACTION ADAPTER C-HDM-300 SERIES (NOT SHOWN).
3. ONCE GAS SHOCK SITS PROUD OF THE INNER POLE REATTACH SMALL PLASTIC DISC.

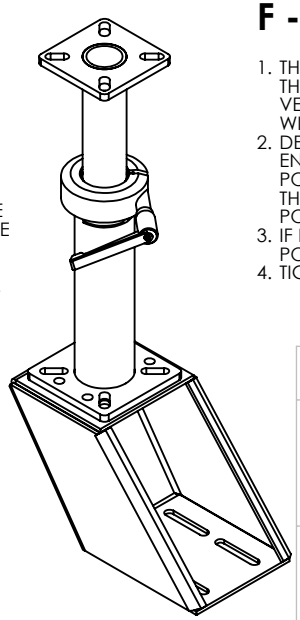




E - INSTALL C-HDM-409 OPTIONAL & COLLAR CLAMP ALIGNMENT

1. THIS CAN BE DONE EITHER AT THIS POINT OR ONCE THE C-HDM-100 SERIES BASE IS ALREADY IN THE VEHICLE. YOU WILL NEED THE OFFSET THAT WAS WIITH THE C-HDM-100 BASE IF APPLICABLE.
2. DECIDE ON THE ORIENTATION OF THE C-HDM-409. ENSURING THAT IF THE HANDLE VERSION OF THE POLE IS BEING USED THE TWO SLOTS ARE NO MORE THAN 45 DEG APART IF THIS IS THE CASE ROTATE THE POLE TO THE CORRECT POSITION.
3. IF NO HANDLE IS BEING USED ENSURE THE OUTER POLE SLOT AND THE CLAMP COLLAR SLOT LINE UP.
4. TIGHTEN ALL THE HARDWARE.





F - INSTALL C-HDM-410-412 OPTIONAL

1. THIS CAN BE DONE EITHER AT THIS POINT OR ONCE THE C-HDM-100 SERIES BASE IS ALREADY IN THE VEHICLE. YOU WILL NEED THE OFFSET THAT WAS WIITH THE C-HDM-100 BASE IF APPLICABLE.
2. DECIDE ON THE ORIENTATION OF THE OFFSET. ENSURING THAT IF THE HANDLE VERSION OF THE POLE IS BEING USED THE TWO SLOTS ARE NO MORE THAN 45 DEG APART IF THIS IS THE CASE ROTATE THE POLE TO THE CORRECT POSITION.
3. IF NO HANDLE IS BEING USED ENSURE THE OUTER POLE SLOT AND THE CLAMP COLLAR SLOT LINE UP.
4. TIGHTEN ALL THE HARDWARE.

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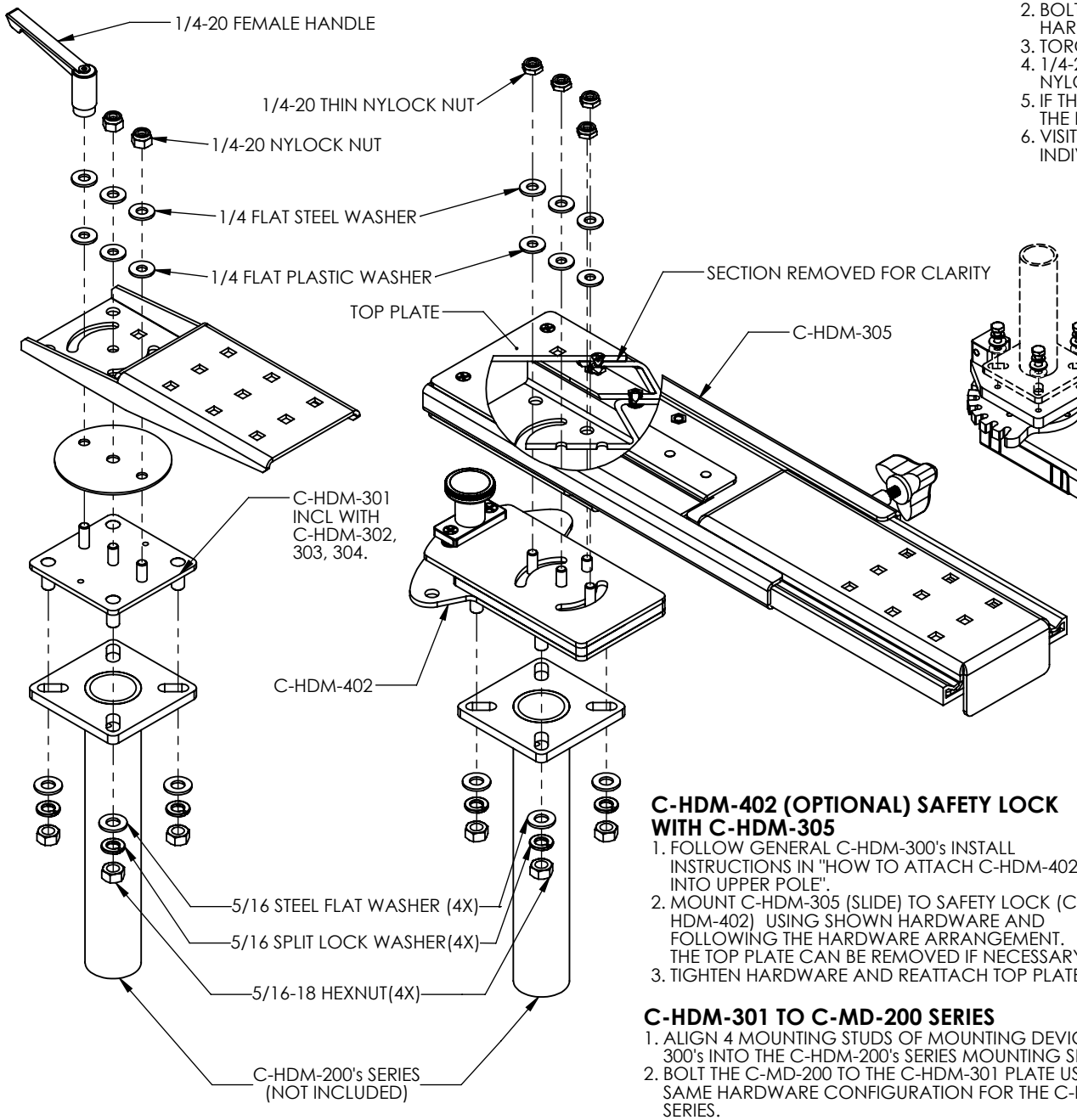
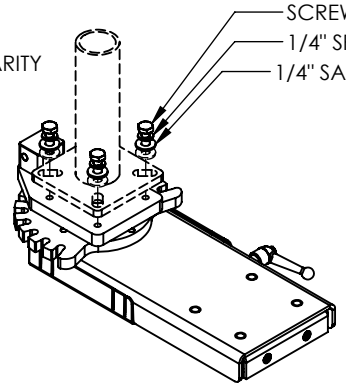
TITLE:

ASSEMBLY INSTRUCTIONS , HDM 200 SERIES, POLE ASSEMBLY

SIZE	DWG. NO.	REV
A	C-HDM-200-INST	4/6/10

STEP 3 C-HDM-300's SERIES INSTALL INTRUCTIONS





GENERAL C-HDM-300's INSTALL INSTRUCTIONS

1. ALIGN 4 MOUNTING STUDS OF MOUNTING DEVICE C-HDM-300's INTO THE HDM-200's SERIES MOUNTING SLOTS.
2. BOLT THE MOUNT TOGETHER USING SPECIFIED AND SUPPLIED HARDWARE.
3. TORQUE THE 5/16 HARDWARE TO INDUSTRY STANDARDS .
4. 1/4-20 FEMALE HANDLE CAN BE SUBSTITUTED FOR 1/4-20 NYLOCK NUT.
5. IF THE C-HDM-300 IS TO BE STATIONARY BOLT DIRECTLY TO THE POLE USING 5/16-18 HARDWARE.
6. VISIT US AT www.havis.com TO SEE PICTURES OF INDIVIDUALLY INSTALLED PRODUCTS.

C-MD-100 SERIES

1. PLACE C-MD-100 SERIES MOTION DEVICE ON TOP OF POLE MOUNTING SURFACE.
2. LINE UP THE 4 TAPPED HOLES WITH THE UPPER POLE MOUNTING SLOTS.
3. ATTACH THE FOUR 1/4-20 HEX BOLTS & LOCK WASHERS AND FLAT WASHER AS SHOWN THROUGH THE THREADED HOLES OF THE MOTION DEVICE.
4. TIGHTEN HARDWARE.

C-HDM-402 (OPTIONAL) SAFETY LOCK WITH C-HDM-305

1. FOLLOW GENERAL C-HDM-300's INSTALL INSTRUCTIONS IN "HOW TO ATTACH C-HDM-402 INTO UPPER POLE".
2. MOUNT C-HDM-305 (SLIDE) TO SAFETY LOCK (C-HDM-402) USING SHOWN HARDWARE AND FOLLOWING THE HARDWARE ARRANGEMENT. THE TOP PLATE CAN BE REMOVED IF NECESSARY
3. TIGHTEN HARDWARE AND REATTACH TOP PLATE.

C-MKM-100 SERIES TO C-HDM-200 SERIES

1. NUT AND BOLT TOGETHER USING 5/16-18 HARDWARE CONFIGURATION SHOWN ABOVE.

C-HDM-301 TO C-MD-200 SERIES

1. ALIGN 4 MOUNTING STUDS OF MOUNTING DEVICE C-HDM-300's INTO THE C-HDM-200's SERIES MOUNTING SLOTS.
2. BOLT THE C-MD-200 TO THE C-HDM-301 PLATE USING THE SAME HARDWARE CONFIGURATION FOR THE C-HDM-300 SERIES.
3. TIGHTEN HARDWARE.

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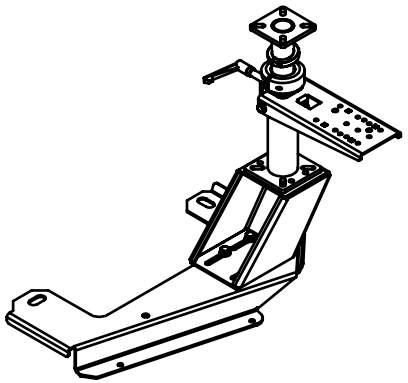
TITLE:

INSTALLATION INSTRUCTION, C-HDM-300's AND HDM-400's

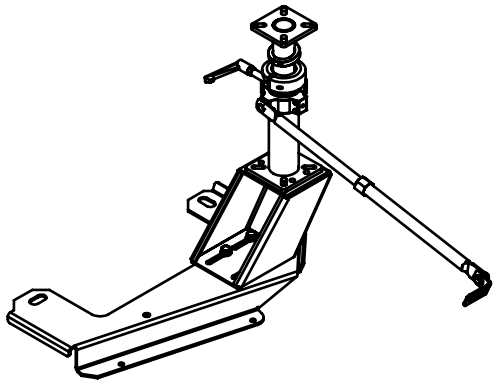
SIZE	DWG. NO.	REV
A	C-HDM-300-400-INST	4/6/10

STEP 4 HDM VEHICLE MOUNTING AND INSTALLATION OF OPTIONAL ACCESSORIES



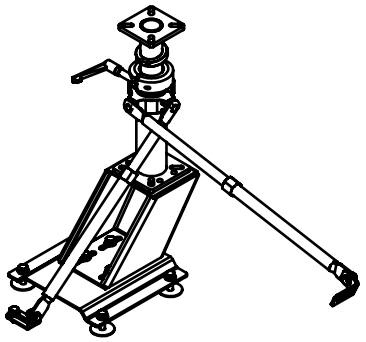
A- C-HDM-403 HORIZONTAL PRINTER MOUNT

1. LOOSELY ATTACH SPIDER (CLAMP) COLLAR TO POLE WITH HARDWARE SUPPLIED (IF NOT ALREADY ATTACHED). POSITION AS DESIRED AND TIGHTEN HARDWARE.
2. ATTACH C-HDM-403 PLATE USING HARDWARE PROVIDED. AVOID TIGHTENING SCREWS IF AN OFFSET ARM IS TO BE ADDED.
3. ATTACH DESIRED ITEM TO SHELF BRACKET.
4. ***THE C-HDM-403 WORKS VERY WELL IF THERE IS NO CENTER CONSOLE. SPACE IS VERY LIMITED AND WILL CAUSE LACK OF LEG ROOM IF THE VEHICLE DOES HAVE A CENTER CONSOLE.***



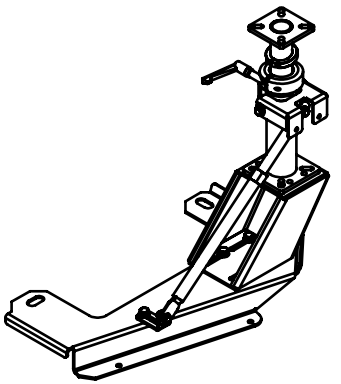
B- C-HDM-401 SUPPORT ARM

1. LOOSELY ATTACH SPIDER (CLAMP) COLLAR TO POLE WITH HARDWARE SUPPLIED (IF NOT ALREADY ATTACHED). POSITION AS DESIRED AND TIGHTEN HARDWARE.
2. LOOSELY ATTACH C-HDM-401 USING HARDWARE PROVIDED.
3. FIND A SUITABLE LOCATION TO ATTACH THE OTHER END OF THE SUPPORT ARM. SOME VEHICLES HAVE HOLES UNDER THE DASH OR OEM HARDWARE THAT CAN BE UTILISED. LOOSELY ATTACH TAB PROVIDED.
4. EXTEND THE ARM ATTACHING THE TAB TO THE SUPPORT ARM WITH THE HARDWARE PROVIDED.
5. TIGHTEN ALL HARDWARE.



C- C-HDM-404 SUPPORT ARM

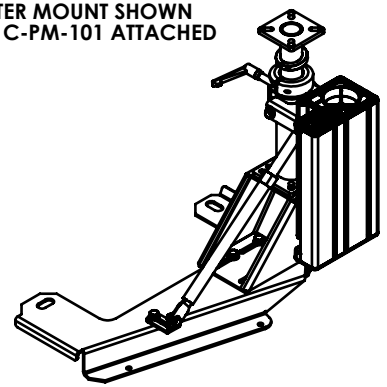
1. THE C-HDM-404 IS PRIMARILY USED FOR UNIVERSAL FLOOR MOUNTS WHEN PREMIUM STRENGTH / 3 POINT MOUNTING IS NECESSARY.
2. COMPLETE SECTION B.
3. LOOSELY ATTACH C-HDM-404 USING HARDWARE PROVIDED.
4. THE MAJORITY OF HAVIS BASES HAVE AN EXTRA PEM IN ORDER TO ATTACH TO THE SUPPORT ARM. IF NOT FIND ANOTHER LOCATION OR DRILL AND THROUGH BOLT THE TAB BRACKET.
5. EXTEND THE SUPPORT ARM AND ATTACH WITH SUPPLIED HARDWARE.
6. TIGHTEN ALL HARDWARE.

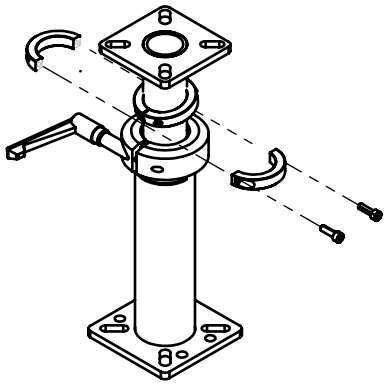


D- C-HDM-417 VERTICAL PRINTER MOUNT

1. COMPLETE SECTION B.
2. LOOSELY ATTACH C-HDM-417 BRACKET USING THE HARDWARE PROVIDED.
3. SLIDE TWO CARRIAGE BOLTS IN THE C-PM-101 SLOTS.
4. LOCATE THE TWO HOLES IN THE C-HDM-417 BRACKET PUSH THE CARRIAGE BOLTS THROUGH THE HOLES AND FINGER TIGHTEN THE SERRATED NUTS PROVIDED.
5. SLIDE THE PRINTER TO THE RIGHT POSITION AND TIGHTEN ALL HARDWARE.

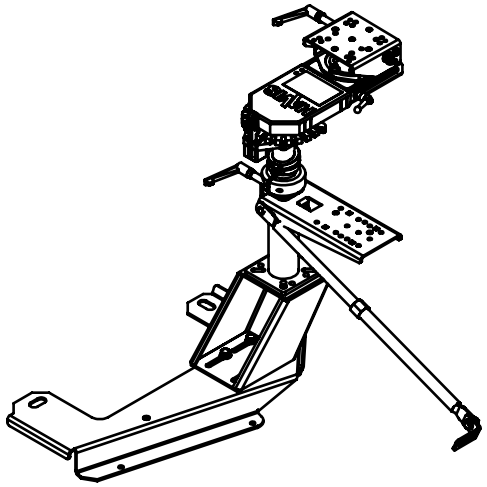
D- C-HDM-417 VERTICAL PRINTER MOUNT SHOWN WITH C-PM-101 ATTACHED





E- ATTACHING THE SHAFT STOP COLLAR THAT COMES WITH TELESCOPING POLE WITH HANDLE

1. SLIDE THE INNER POLE TO THE DESIRED HEIGHT.
2. ATTACH THE SHAFT COLLAR USING THE HARDWARE PROVIDED.
3. INNER POLE SHOULD NOW SPIN FREELY WHILE MAINTAINING THE DESIRED HEIGHT.



F- EXAMPLE OF A FINISHED ASSEMBLY

1. THE ABOVE ASSEMBLY INCLUDES A C-HDM-102, C-HDM-202, C-MD-102, C-HDM-403, C-HDM-404(2X)

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TITLE:

C-HDM INSTALLATION INSTRUCTIONS

DO NOT SCALE DRAWING

SIZE	DWG. NO.	REV
A	C-HDM-400-INST	4/6/10